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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,255	04/26/2001	Yoshihiro Kayano	2001_0474A	7526

513 7590 12/16/2003

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EXAMINER

FONTAINE, MONICA A

ART UNIT PAPER NUMBER

1732

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/842,255

Applicant(s)

KAYANO ET AL.

Examiner

Monica A Fontaine

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-18 is/are allowed.
- 6) ☒ Claim(s) 5-7 and 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

This office action is in response to the Amendment filed 2 October 2003.

The following rejections have been overcome:

A. 35 USC 102(b) as anticipated by Vecchiarino et al. (U.S. Patent 5,799,385), hereafter "Vecchiarino": Claims 5-7

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 5-7 and 19-21 are rejected under 35 U.S.C. 102(a) as being anticipated by Keller et al. (U.S. Patent 6,063,315). Regarding Claim 5, Keller et al., hereafter "Keller," show that it is known to carry out a method for injection-molding a molded article having a hollow portion by means of an injection-molding apparatus (Abstract), said apparatus comprising a mold assembly having a first molten resin injection portion for injecting a first molten thermoplastic resin into a cavity of the mold assembly (Figure 4, element 32), a second molten resin injection portion for injecting a second molten thermoplastic resin into the cavity of the mold assembly (Figure 4, element 34), and a pressurized fluid introducing portion for introducing a pressurized fluid into the second molten thermoplastic resin injected into the cavity (Figure 4, element 40), and a first injection cylinder communicating with the first molten resin injection portion and a second

Art Unit: 1732

injection cylinder communicating with the second molten resin injection portion (Figure 4, elements 76, 32), said method comprising the steps of injecting the first molten thermoplastic resin from the first injection cylinder into the cavity through the first molten resin injection portion (Column 3, lines 1-4), initiating injection of the second molten thermoplastic resin from the second cylinder into the cavity through the second injection portion, without bringing the second molten thermoplastic resin into contact with the first molten thermoplastic resin injected into the cavity during said injecting the first molten thermoplastic resin into the cavity or after the completion of said injecting the first molten thermoplastic resin into the cavity (Column 3, lines 5-10; Column 8, lines 24-35; Column 14, lines 49-60), and introducing the pressurized fluid into the second molten thermoplastic resin in the cavity from the pressurized fluid introducing portion during said injecting the second molten thermoplastic resin into the cavity or after completion of injection thereof to, to thereby form the hollow portion inside the second thermoplastic resin (Column 4, lines 9-17, 46-52).

Regarding Claim 6, Keller shows the process as claimed as discussed in the rejection of Claim 5 above, including a method wherein the first molten thermoplastic resin comes into contact with the second molten thermoplastic resin in said introducing the pressurized fluid into the second molten thermoplastic resin in the cavity, the first molten thermoplastic resin being in a molten state when the first molten thermoplastic resin comes into contact with the second thermoplastic resin (Column 3, lines 60-67; Column 4, lines 1-2, 11-17, 33-52).

Regarding Claim 7, Keller shows the process as claimed as discussed in the rejection of Claim 5 above, including a method wherein a portion of the first molten thermoplastic resin comes in contact with the second molten thermoplastic resin in said introducing the pressurized

Art Unit: 1732

fluid into the second molten thermoplastic resin in the cavity, the portion of the first molten thermoplastic resin coming into a re-melted state due to the contact thereof with the second molten thermoplastic resin (Column 3, lines 60-67; Column 4, lines 1-2, 11-17, 33-52).

Regarding Claim 19, Keller shows that it is known to carry out a method for injection-molding a molded article having a hollow portion by means of an injection-molding apparatus (Abstract), said method comprising providing a mold assembly having a cavity disposed between a first molten resin injection portion and a second molten resin injection portion, and a pressurized fluid introducing portion provided at an opening of the cavity (Figure 4, elements 32, 34, 40), injecting the first molten thermoplastic resin from a first injection cylinder into the cavity through the first molten resin injection portion (Column 3, lines 1-4), injecting a second molten thermoplastic resin from a second cylinder into the cavity through the second injection portion, without bringing the second molten thermoplastic resin into contact with the first molten thermoplastic resin injected into the cavity during said injecting the first molten thermoplastic resin into the cavity or after the completion of said injecting the first molten thermoplastic resin into the cavity (Column 3, lines 5-10; Column 8, lines 24-35; Column 14, lines 49-60), and introducing the pressurized fluid into the second molten thermoplastic resin in the cavity from the pressurized fluid introducing portion during said injecting the second molten thermoplastic resin into the cavity or after completion of injection thereof to, to thereby form the hollow portion inside the second thermoplastic resin (Column 4, lines 9-17, 46-52).

Regarding Claim 20, Keller shows the process as claimed as discussed in the rejection of Claim 19 above, including a method wherein the first molten thermoplastic resin comes into

Art Unit: 1732

contact with the second molten thermoplastic resin in said introducing the pressurized fluid into the second molten thermoplastic resin in the cavity, the first molten thermoplastic resin being in a molten state when the first molten thermoplastic resin comes into contact with the second thermoplastic resin (Column 3, lines 60-67; Column 4, lines 1-2, 11-17, 33-52).

Regarding Claim 21, Keller shows the process as claimed as discussed in the rejection of Claim 19 above, including a method wherein a portion of the first molten thermoplastic resin comes in contact with the second molten thermoplastic resin in said introducing the pressurized fluid into the second molten thermoplastic resin in the cavity, the portion of the first molten thermoplastic resin coming into a re-melted state due to the contact thereof with the second molten thermoplastic resin (Column 3, lines 60-67; Column 4, lines 1-2, 11-17, 33-52).

### ***Response to Arguments***

Applicant's arguments, see Paper No. 7, filed 2 October 2003, with respect to the rejection(s) of claim(s) 5-7 under Vecchiarino have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Keller.

### ***Allowable Subject Matter***

The following is stated in Paper No. 6, however it is repeated here for applicant's convenience:

Claims 8-18 are allowed.

Art Unit: 1732

The following is an examiner's statement of reasons for allowance: Regarding Claims 8-12, the prior art of record neither teaches nor suggests the claimed injection molding method wherein a movable partition member is initially disposed between a first cavity portion that the first thermoplastic resin can occupy and a second cavity portion that the second thermoplastic resin can occupy; after injection of the first thermoplastic resin, the movable partition is extracted from the cavity, and then the second thermoplastic resin is injected into the cavity, followed by introduction of a pressurized fluid into the second thermoplastic resin. Regarding Claims 13-18, the prior art of record neither teaches nor suggests the claimed injection molding method wherein a movable partition member is initially disposed between a first cavity portion that the first thermoplastic resin can occupy and a second cavity portion that the second thermoplastic resin can occupy; after the second thermoplastic resin is injected, followed by the introduction of a pressurized fluid into the second thermoplastic resin, the movable partition member is extracted from the cavity, then the first molten thermoplastic resin is injected into the cavity.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1732

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A Fontaine whose telephone number is 703-305-7239.

The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianni can be reached on 703-305-5493. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*Maf*

Maf

December 4, 2003

*new phone number  
after 12/22/03  
571-272-1198*

*Michael Colaianni*

MICHAEL COLAIANNI  
PRIMARY EXAMINER